

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-31 (canceled)

Claim 32 (new): A method for inhibiting expression of a polynucleotide sequence of hepatitis B virus in an *in vivo* mammalian cell comprising administering to said cell at least one double-stranded RNA effector molecule comprising a sequence selected from the group consisting of SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, and SEQ ID NO:49; wherein U is substituted for T.

Claim 33 (new): The method of claim 32, wherein at least two double-stranded RNA effector molecules are administered to said cell, each comprising a sequence selected from the group consisting of SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:23, and SEQ ID NO: 49.

Claim 34 (new): The method of claim 33, comprising administering to said cell double-stranded RNA effector molecules comprising SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:23, and SEQ ID NO: 49.

Claim 35 (new): The method of claim 32, wherein said administering is accomplished by providing to the *in vivo* mammalian cell at least one expression vector capable of expressing at least one double-stranded RNA effector molecule comprising a sequence selected from the group consisting of SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, and SEQ ID NO:49.

Claim 36 (new): The method of claim 35, comprising providing to the *in vivo* mammalian cell at least one expression vector capable of expressing at least two double-stranded RNA effector molecules comprising a sequence selected from the group consisting of SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, and SEQ ID NO: 49.

Claim 37 (new): The method of claim 36, comprising expressing at least four double-stranded RNA effector molecules comprising a sequence selected from the group consisting of SEQ NO:18, SEQ ID NO:19, SEQ ID NO:23, and SEQ ID NO:49.

Claim 38 (new): The method of claim 35, wherein said at least one expression vector comprises a promoter selected from the group consisting of an RNA polymerase I promoter, an RNA polymerase II promoter, a T7 polymerase promoter, an SP6 polymerase promoter, an RNA polymerase III promoter, a tRNA promoter, and a mitochondrial promoter, said promoter operably linked to a sequence encoding one or more of said double-stranded RNA effector molecules.

Claim 39 (new): The method of claim 32, wherein the mammalian cell is a human cell.

Claim 40 (new): A composition for inhibiting the expression of a polynucleotide sequence of hepatitis B virus in an *in vivo* mammalian cell comprising at least one double-stranded RNA effector molecule, each double-stranded RNA effector molecule comprising a sequence selected from the group consisting of SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, and SEQ ID NO:49; wherein U is substituted for T.

Claim 41 (new): A composition of claim 40, comprising at least one expression vector capable of expressing at least one of said double-stranded RNA effector molecules in a mammalian cell.

Claim 42 (new): A composition of claim 41, wherein the expression vector comprises at least one promoter selected from the group consisting of a polymerase I promoter, a polymerase III promoter, a U6 promoter, an H1 promoter, a 7SK promoter, and a mitochondrial promoter, said promoter operably linked to a sequence encoding one or more of said double-stranded RNA effector molecules.

Claim 43 (new): A composition of 40, comprising at least one expression vector capable of expressing in an *in vivo* mammalian cell a double-stranded RNA effector molecule comprising SEQ ID NO:18; a double-stranded RNA effector molecule comprising SEQ ID NO:19; a double-stranded RNA effector molecule comprising SEQ ID NO:23; and a double-stranded RNA effector molecule comprising SEQ ID NO:49; wherein U is substituted for T.

Claim 44 (new): A mammalian cell comprising an expression vector of claim 41.

Claim 45 (new): A method for inhibiting expression of a polynucleotide sequence of hepatitis B virus in an *in vivo* mammalian cell comprising administering to said cell at least two double-stranded RNA effector molecules, each double-stranded RNA effector molecule comprising: (a) a sequence selected from the group consisting of SEQ ID NO: 54, SEQ ID NO: 55, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, and SEQ ID NO:62; (b) the reverse complement of said selected sequence; and (c) optionally, a sequence linking sequences (a) and (b); wherein U is substituted for T.

Claim 46 (new): The method of claim 45, wherein said at least two double-stranded RNA effector molecules are administered to the cell by providing at least one expression vector encoding the double-stranded RNA effector molecules.

Claim 47 (new): The method of claim 46, wherein the double-stranded RNA effector molecules are hairpin dsRNA molecules.

Claim 48 (new): The method of claim 46, wherein the expression vector comprises at least one promoter selected from the group consisting of a polymerase I promoter, a polymerase III promoter, a U6 promoter, an H1 promoter, a 7SK promoter, and a mitochondrial promoter, said promoter operably linked to a sequence encoding one or more of said double-stranded RNA effector molecules.

Claim 49 (new): A composition for inhibiting expression of a polynucleotide sequence of hepatitis B virus in an *in vivo* mammalian cell comprising at least two double-stranded RNA effector molecules, each double-stranded RNA effector

molecule comprising: (a) a sequence selected from the group consisting of SEQ ID NO: 54, SEQ ID NO: 55, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, and SEQ ID NO:62; (b) the reverse complement of said selected sequence; and (c) optionally, a sequence linking sequences (a) and (b); wherein U is substituted for T.

Claim 50 (new): The composition of claim 49, comprising at least one expression vector encoding said at least two double-stranded RNA effector molecules.

Claim 51 (new): The composition of claim 50, wherein the double-stranded RNA effector molecules are hairpin dsRNA molecules.

Claim 52 (new): The composition of claim 50, wherein the expression vector comprises at least one promoter selected from the group consisting of a polymerase I promoter, a polymerase III promoter, a U6 promoter, an H1 promoter, a 7SK promoter, and a mitochondrial promoter, said promoter operably linked to a sequence encoding one or more of said double-stranded RNA effector molecules.

Claim 53 (new): A method for inhibiting expression of a polynucleotide sequence of hepatitis C virus in an *in vivo* mammalian cell comprising administering to said cell at least two double-stranded RNA effector molecules comprising: (a) an RNA sequence equivalent to a hepatitis C virus DNA coding strand sequence selected from the group consisting of sequence position 9510-9531, 9510-9533, 9510-9534, 9510-9535, 9510-9536, 9514-9534, 9514-9535, 9514-9536, 9514-9539, 9514-9540, 9514-9542, 9517-9539, 9517-9540, 9517-9542, 9517-9544, 9518-9539, 9518-9540, 9518-9542, 9518-9544, 9520-9540, 9520-9542, 9520-9544, 9520-9548, 9521-9542, 9521-9544, 9521-9548, 9521-9549, 9522-9542, 9522-9544, 9522-9548, 9522-9549, 9527-9548, 9527-9549, 9527-9551, 9527-9552, 9527-9553, 9527-9555, 9528-9548, 9528-9549, 9528-9551, 9528-9552, 9528-9553, 9528-9555, 9530-9551, 9530-9552, 9530-9553, 9530-9555, 9530-9557, 9530-9558, 9532-9552, 9532-9553, 9532-9555, 9532-9557, 9532-9558, 9532-9559, 9532-9560, 9537-9557, 9537-9558, 9537-9559, 9537-9560, 9537-9561, 9537-9564, 9538-9558, 9538-9559, 9538-9560, 9538-9561, 9538-9564, 9538-9566, 9541-9561, 9541-9564, 9541-9566, 9541-9568, 9541-9569, 9543-9564, 9543-9566, 9543-9568, 9543-9569, 9543-9571, 9545-9566, 9545-9568,

9545-9569, 9545-9571, 9545-9573, 9546-9564, 9546-9566, 9546-9569, 9546-9571, 9546-9573, 9547-9568, 9547-9569, 9547-9571, 9547-9573, 9547-9575, 9550-9571, 9550-9573, 9550-9575, 9550-9577, 9550-9578, 9554-9575, 9554-9577, 9554-9578, 9554-9580, 9556-9577, 9556-9578, 9556-9580, 9556-9584, 9562-9584, 9562-9586, 9562-9587, 9562-9588, 9562-9589, 9563-9584, 9563-9586, 9563-9587, 9563-9588, 9563-9589, 9563-9591, 9565-9586, 9565-9587, 9565-9588, 9565-9589, 9565-9591, 9565-9593, 9567-9587, 9567-9588, 9567-9589, 9567-9591, 9567-9593, 9567-9595, 9570-9591, 9570-9593, 9570-9595, 9570-9596, 9570-9598, 9572-9593, 9572-9595, 9572-9596, 9572-9598, 9574-9595, 9574-9596, 9574-9598, 9574-9601, 9576-9596, 9576-9598, 9576-9601, 9576-9604, 9579-9601, 9579-9604, 9581-9601, 9581-9604, and 9583-9604; (b) an RNA sequence which is the reverse complement of the selected hepatitis C virus DNA coding strand sequence; and, optionally, (c) a sequence linking (a) and (b).

Claim 54 (new): The method of claim 53, wherein said administering is accomplished by providing one or more expression vectors capable of expressing in said mammalian cell said at least two double-stranded RNA effector molecules.

Claim 55 (new): The method of claim 54, wherein said one or more expression vectors comprise at least one promoter selected from an RNA polymerase I promoter, an RNA polymerase II promoter, a T7 polymerase promoter, an SP6 polymerase promoter, an RNA polymerase III promoter, a tRNA promoter, and a mitochondrial promoter, said promoter operably linked to a sequence encoding at least one of said double-stranded RNA effector molecules.

Claim 56 (new): The method of Claim 55, wherein at least one expression vector comprises at least two expression cassettes, each expression cassette comprising at least one RNA polymerase III promoter selected from the group consisting of a U6 promoter, a 7SK promoter, an H1 promoter, and an MRP promoter.

Claim 57 (new): The method of claim 53, wherein the mammalian cell is a human cell.

Claim 58 (new): A composition for inhibiting the expression of a polynucleotide sequence of hepatitis C virus in an *in vivo* mammalian cell comprising at least two double-stranded RNA effector molecules, each comprising: (a) an RNA sequence equivalent to a hepatitis C virus DNA coding strand sequence selected from the group consisting of sequence position 9510-9531, 9510-9533, 9510-9534, 9510-9535, 9510-9536, 9514-9534, 9514-9535, 9514-9536, 9514-9539, 9514-9540, 9514-9542, 9517-9539, 9517-9540, 9517-9542, 9517-9544, 9518-9539, 9518-9540, 9518-9542, 9518-9544, 9520-9540, 9520-9542, 9520-9544, 9520-9548, 9521-9542, 9521-9544, 9521-9548, 9521-9549, 9522-9542, 9522-9544, 9522-9548, 9522-9549, 9527-9548, 9527-9549, 9527-9551, 9527-9552, 9527-9553, 9527-9555, 9528-9548, 9528-9549, 9528-9551, 9528-9552, 9528-9553, 9528-9555, 9530-9551, 9530-9552, 9530-9553, 9530-9555, 9530-9557, 9530-9558, 9532-9552, 9532-9553, 9532-9555, 9532-9557, 9532-9558, 9532-9559, 9532-9560, 9537-9557, 9537-9558, 9537-9559, 9537-9560, 9537-9561, 9537-9564, 9538-9558, 9538-9559, 9538-9560, 9538-9561, 9538-9564, 9538-9566, 9541-9561, 9541-9564, 9541-9566, 9541-9568, 9541-9569, 9543-9564, 9543-9566, 9543-9568, 9543-9569, 9543-9571, 9545-9566, 9545-9568, 9545-9569, 9545-9571, 9545-9573, 9546-9564, 9546-9566, 9546-9569, 9546-9571, 9546-9573, 9547-9568, 9547-9569, 9547-9571, 9547-9573, 9547-9575, 9550-9571, 9550-9573, 9550-9575, 9550-9577, 9550-9578, 9554-9575, 9554-9577, 9554-9578, 9554-9580, 9556-9577, 9556-9578, 9556-9580, 9556-9584, 9562-9584, 9562-9586, 9562-9587, 9562-9588, 9562-9589, 9563-9584, 9563-9586, 9563-9587, 9563-9588, 9563-9589, 9563-9591, 9565-9586, 9565-9587, 9565-9588, 9565-9589, 9565-9591, 9565-9593, 9567-9587, 9567-9588, 9567-9589, 9567-9591, 9567-9593, 9567-9595, 9570-9591, 9570-9593, 9570-9595, 9570-9596, 9570-9598, 9572-9593, 9572-9595, 9572-9596, 9572-9598, 9574-9595, 9574-9596, 9574-9598, 9574-9601, 9576-9596, 9576-9598, 9576-9601, 9576-9604, 9579-9601, 9579-9604, 9581-9601, 9581-9604, and 9583-9604; (b) an RNA sequence which is the reverse complement of the selected hepatitis C virus DNA coding strand sequence; and, optionally, (c) a sequence linking (a) and (b).

Claim 59 (new): An expression vector encoding a composition of claim 58.

Claim 60 (new): A mammalian cell comprising an expression construct of claim 59.

Claim 61 (new): An expression vector of claim 59 comprising at least one promoter selected from an RNA polymerase I promoter, an RNA polymerase II promoter, a T7 polymerase promoter, an SP6 polymerase promoter, an RNA polymerase III promoter, a tRNA promoter, and a mitochondrial promoter, said promoter operably linked to a sequence encoding at least one of said double-stranded RNA effector molecules.

Claim 62 (new): An expression vector of claim 61 comprising at least two expression cassettes, each expression cassette comprising at least one RNA polymerase III promoter selected from the group consisting of a U6 promoter, a 7SK promoter, an H1 promoter, and a MRP promoter, each of said RNA polymerase III promoters operably linked to a sequence encoding a double-stranded RNA effector molecule.

Claim 63 (new): A method for inhibiting expression of a polynucleotide sequence of hepatitis B virus in an *in vivo* mammalian cell comprising administering to said cell a double-stranded RNA effector molecule comprising an at least 19 contiguous base pair nucleotide sequence from within a sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, and SEQ ID NO:10; wherein U is substituted for T.

Claim 64 (new): The method of claim 63, wherein at least two of said double-stranded RNA effector molecules are administered to the same mammalian cell.

Claim 65 (new): The method of claim 64, wherein said at least two double-stranded RNA effector molecules comprise an at least 19 contiguous base pair nucleotide sequence from within more than one of SEQ ID NO:1 through SEQ ID NO:10.

Claim 66 (new): The method of claim 65, wherein said administering is accomplished by providing one or more expression vectors capable of expressing in said mammalian cell said at least two double-stranded RNA effector molecules.

Claim 67 (new): The method of claim 66, wherein said one or more expression vectors further comprise a promoter selected from an RNA polymerase I promoter, an RNA polymerase II promoter, a T7 polymerase promoter, an SP6 polymerase promoter, an RNA polymerase III promoter, a tRNA promoter, and a mitochondrial promoter, said promoter operably linked to a sequence encoding at least one of said double-stranded RNA effector molecules.

Claim 68 (new): A method for inhibiting expression of a polynucleotide sequence of hepatitis C virus in an *in vivo* mammalian cell comprising administering to said cell a double-stranded RNA effector molecule comprising an at least 19 contiguous base pair nucleotide sequence from within a sequence selected from the group consisting of SEQ ID NO:11 and SEQ ID NO:12; wherein U is substituted for T.

Claim 69 (new): The method of claim 68, wherein at least two of said double-stranded RNA effector molecules are administered to the same mammalian cell.

Claim 70 (new): The method of claim 69, wherein said at least two double-stranded effector molecules comprise an at least 19 contiguous base pair nucleotide sequence from within more than one of SEQ ID NO:11; SEQ ID NO:12; and SEQ ID NO: 27.

Claim 71 (new): The method of claim 70, wherein said administering is accomplished by providing one or more expression vectors capable of expressing in said mammalian cell said at least two double-stranded RNA effector molecules.

Claim 72 (new): The method of claim 71, wherein said one or more expression vectors comprise one or more promoters selected from an RNA polymerase I promoter, an RNA polymerase II promoter, a T7 polymerase promoter, an SP6 polymerase promoter, an RNA polymerase III promoter, a tRNA promoter, and a

mitochondrial promoter, said promoter operably linked to a sequence encoding at least one of said double-stranded RNA effector molecules.

Claim 73 (new): The method of claim 72, wherein at least one expression vector comprises at least two expression cassettes, each expression cassette comprising at least one RNA polymerase III promoter selected from the group consisting of a U6 promoter, a 7SK promoter, an H1 promoter, and a MRP promoter, each of said RNA polymerase III promoters operably linked to a sequence encoding a said double-stranded RNA effector molecule.

Claim 74 (new): A method for inhibiting expression of both a polynucleotide sequence of hepatitis B virus and a polynucleotide sequence of hepatitis C virus in the same *in vivo* mammalian cell, comprising administering to said cell a double-stranded RNA effector molecule comprising a first at least 19 contiguous base pair nucleotide sequence from within a sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, and SEQ ID NO:10; wherein U is substituted for T; and a double-stranded RNA effector molecule comprising a second at least 19 contiguous base pair nucleotide sequence from within a sequence selected from the group consisting of SEQ ID NO:11; SEQ ID NO:12; and SEQ ID NO: 27; wherein U is substituted for T.

Claim 75 (new): The method of claim 74, wherein at least two double-stranded RNA effector molecules comprising an at least 19 contiguous base pair nucleotide sequence from within SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, and SEQ ID NO:10; and at least two double-stranded RNA effector molecules comprising an at least 19 contiguous base pair nucleotide sequence from within SEQ ID NO: 11, SEQ ID NO:12, and SEQ ID NO: 27, are administered to the same *in vivo* mammalian cell.

Claim 76 (new): The method of claim 74, wherein said administering is accomplished by providing one or more expression vectors capable expressing said double-stranded RNA effector molecules in said mammalian cell.

Claim 77 (new): The method of claim 76, wherein said one or more expression vectors comprise one or more promoters selected from the group consisting of an RNA polymerase I promoter, an RNA polymerase II promoter, a T7 polymerase promoter, an SP6 polymerase promoter, an RNA polymerase III promoter, a tRNA promoter, and a mitochondrial promoter, said promoter(s) operably linked to a sequence encoding at least one of said double-stranded RNA effector molecules.

Claim 78 (new): A composition for inhibiting the expression of a polynucleotide sequence of hepatitis B virus in an *in vivo* mammalian cell comprising a double-stranded RNA effector molecule comprising an at least 19 contiguous base pair nucleotide sequence from within a sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, and SEQ ID NO:10; wherein U is substituted for T.

Claim 79 (new): The composition of claim 78 comprising at least two double-stranded RNA effector molecules wherein said effector molecules comprise an at least 19 contiguous base pair nucleotide sequence from within more than one of SEQ ID NO:1 through SEQ ID NO:10.

Claim 80 (new): A composition of claim 79, comprising at least two double-stranded RNA effector molecules comprising an at least 19 contiguous base pair nucleotide sequence from within more than one of SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, and SEQ ID NO:8.

Claim 81 (new): A composition of claim 80, comprising at least three double-stranded RNA effector molecules each comprising an at least 19 contiguous base pair nucleotide sequence from within at least three of SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, and SEQ ID NO:8.

Claim 82 (new): A composition for inhibiting the expression of a polynucleotide sequence of hepatitis C virus in an *in vivo* mammalian cell comprising a double-stranded RNA effector molecule comprising an at least 19 contiguous base pair nucleotide sequence from within a sequence selected from the group consisting of SEQ ID NO:11 and SEQ ID NO:12; wherein U is substituted for T.

Claim 83 (new): The composition of claim 82 comprising at least two double-stranded RNA effector molecules, wherein effector molecules comprising an at least 19 contiguous base pair nucleotide sequence from within more than one of SEQ ID NO:11, SEQ ID NO:12, and SEQ ID NO: 27 are present in the composition.

Claim 84 (new): The composition of claim 83 comprising at least one expression construct capable of expressing the at least two double stranded RNA effector molecules in an *in vivo* mammalian cell.

Claim 85 (new): A composition for inhibiting the expression of both a polynucleotide sequence of hepatitis B virus and a polynucleotide sequence of hepatitis C virus in a single *in vivo* mammalian cell comprising a double-stranded RNA effector molecule comprising a first at least 19 contiguous base pair nucleotide sequence from within a sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, and SEQ ID NO:10; wherein U is substituted for T; and a double-stranded RNA effector molecule comprising a second at least 19 contiguous base pair nucleotide sequence from within a sequence selected from the group consisting of SEQ ID NO:11, SEQ ID NO:12, and SEQ ID NO:27; wherein U is substituted for T.

Claim 86 (new): The composition of claim 85 comprising at least one expression construct capable of expressing the at least two double stranded RNA effector molecules in an *in vivo* mammalian cell.

Claim 87 (new): The composition of claim 85 comprising at least two double-stranded RNA effector molecules comprising an at least 19 contiguous base pair nucleotide sequence from within SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, and SEQ ID NO:10; and at least two double-stranded RNA effector molecules comprising an at least 19 contiguous base pair nucleotide sequence from within SEQ ID NO: 11, SEQ ID NO:12, and SEQ ID NO: 27.

Claim 88 (new): The composition of claim 87 comprising at least one expression vector capable of expressing said double-stranded RNA effector molecules.

Claim 89 (new): The composition of claim 87 comprising at least two double-stranded RNA effector molecules comprising an at least 19 contiguous base pair nucleotide sequence from within SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, and SEQ ID NO:8.

Claim 90 (new): A composition of claim 89 comprising at least one expression vector capable of expressing said at least two double-stranded RNA effector molecules in an *in vivo* mammalian cell.

Claim 91 (new): A polynucleotide sequence comprising a sequence selected from SEQ ID NO:14 through SEQ ID NO:26, and SEQ ID NO:49.

Claim 92 (new): A polynucleotide sequence comprising nucleotides 1-19, 1-20, 1-21, 2-20, 2-21, or 3-21 of a sequence selected from SEQ ID NO:14 through SEQ ID NO:26, and SEQ ID NO:49.

Claim 93 (new): A polynucleotide sequence comprising an at least 19 contiguous base pair nucleotide sequence from within a sequence selected from SEQ ID NO:27 through SEQ ID NO:44, SEQ ID NO: 50 through SEQ ID NO:62, and SEQ ID NO: 72 through 76.

Claim 94 (new): A composition for inhibiting the expression of a polynucleotide sequence of hepatitis C virus in a mammalian cell, comprising a double-stranded RNA effector molecule comprising an at least 19 contiguous base pair nucleotide sequence from within SEQ ID NO:27; wherein U is substituted for T.

Claim 95 (new): A composition for inhibiting the expression of a polynucleotide sequence of hepatitis C virus in a mammalian cell, comprising at least one double-stranded RNA effector molecule comprising (a) a sequence selected from the group consisting of SEQ ID NO: 37, SEQ ID NO: 38, SEQ ID NO: 39, SEQ ID NO: 40, SEQ ID NO: 41, SEQ ID NO: 42, SEQ ID NO: 42, SEQ ID NO: 44, SEQ ID NO: 72, SEQ ID NO: 73, SEQ ID NO: 74, SEQ ID NO: 75, and SEQ ID NO: 76, and (b) the reverse complement of said selected sequence; and, optionally, (c) a sequence linking sequences (a) and (b); wherein U is substituted for T.

Claim 97 (new): A composition of claim 95 wherein said at least one double-stranded RNA effector molecule comprises a sequence selected from the group consisting of SEQ ID NO: 72, SEQ ID NO: 73, SEQ ID NO: 74, SEQ ID NO: 75, and SEQ ID NO: 76.

Claim 98 (new): An expression vector encoding a double-stranded RNA effector molecule of claim 95.